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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,309	12/11/2006	George Coulter Kennedy	SPI-01	7162
23508 7590 06/03/2011 LUNDEEN & LUNDEEN, PLLC 2710 Louisiana HOUSTON, TX 77006				
EXAMINER DIAZ, THOMAS C				
ART UNIT		PAPER NUMBER		
3656				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ekonokat@aol.com  
marcee@lpats.com  
dan@lpats.com

# Office Action Summary

**Application No.**

10/595,309

**Applicant(s)**

KENNEDY ET AL.

**Examiner**

THOMAS DIAZ

**Art Unit**

3656

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8-17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 19-22 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-16 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claims 1, 6, 13, 16, 22 are objected to because of the following informalities:

Claim 1 recites "each member having a first end" and "at least one member including one or more tensioning devices". It is recommended for added clarity to amend these recitations to "each clamping member having a first end" and "at least one of said clamping member including one or more tensioning devices" so that it is clear that Applicant is referring to the clamping members.

Claim 6 recites "the first/second end". It is recommended to write this as "the first and second end of the clamping member". In addition, claim 6 recites "each component end". For consistency it is recommended to qualify which component is being referred to.

Claim 13 recites "a pin locating in a matching recess". It is recommended to amend "locating" to - - located - -.

Claim 16 recites "included in the/each member" and "within the member". It is recommended to recite "in at least one of said clamping member" and "within the clamping member".

Claim 22 makes use of the recitation "and/or". This recitation is informal and could be considered ambiguous. It is recommended to recite either the word "and" or the word "or".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-6, 8-10, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labyer et al. (USP 4033701) in view of Percival-Smith (USP 5468106).**

Regarding claim 1, Labyer et al. discloses a piston rod assembly (see fig.1), the assembly comprising one or more clamping members (30, 32) arranged relative to a longitudinal rod axis (axis defined through 14, 18) between the power end (12) and the fluid end (20), each member having a first end [adapted to grip the power end component], and a second end [adapted to grip the fluid end component] (see fig.1; they have a first end and a second end. The "adapted to" language renders that part of the limitation optional and doesn't limit the scope of the claim, see MPEP 2111.04), and at least one member including one or more tensioning devices (36).

Labyer et al. fails to disclose wherein said tensioning device comprises a piston to provide a load in said tensioning device solely orthogonal to said rod axis and thereby secure said components against release.

Percival-Smith teaches the use of a tensioning device (fig.1), said tensioning device comprises a piston (6) to provide a load in said tensioning device.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have replaced at least one of the tensioning device disclosed by Labyer et al. with the tensioning device, as taught by Percival-Smith, which would provide the predictable result of securely fastening the clamping members together. Substituting one known element for another known element which solves the same problem is within the level of ordinary skill in the art.

As a result of the combination, it is clear that the piston would provide a load in said tensioning device solely orthogonal to said rod axis.

Regarding the functional recitation(s) in the claim(s) denoted by the "[ ]" the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all the claimed structural limitations and therefore anticipates the claim. See MPEP 2114. Additionally, the apparatus is capable of performing the claimed functions.

Regarding claim 2, Labyer et al. discloses the clamping members are part cylindrical bodies (see fig.2) *which when arranged on the rod axis provide a substantially cylindrical body (conditional statement).*

Regarding claim 3, Labyer et al. discloses there are two clamping members, an upper clamping member and a lower clamping member (fig.2, 30 and 32).

Regarding claim 4, Labyer et al. discloses the first and second ends include a contact face (fig.1, face 52 or other face of members that are parallel to rod axis) parallel to the rod axis on an inner surface.

Regarding claim 5, Labyer et al. discloses each face provides a recess (fig.1, see recess formed inside the clamping members) on the inner surface *in which a portion of the power end component or fluid end component is located such that the component is gripped and held when the clamping members are brought together by the tensioning device (conditional statement which may or may not occur depending on whether the device is assembled).*

Regarding claim 6, Labyer et al. discloses each component end and the first/second end provide a knuckle joint (see fig.1, the joints are of a knuckle type joint).

Regarding claim 8, Percival-Smith discloses each piston is slideable within an hydraulic cylinder (fig.1, chamber in which the piston is located).

Regarding claim 9, Percival-Smith discloses each piston includes at least one stem (fig.1, 1) [adapted to receive a nut or a lock] (They are capable of receiving a nut or lock).

Regarding the functional recitation(s) in the claim(s) above denoted by the "[ ]" the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all the claimed structural limitations and therefore anticipates the claim. See MPEP 2114. Additionally, the apparatus is capable of performing the claimed functions.

Regarding claim 10, Labyer in view of Percival-Smith discloses each piston includes at least one stem (fig.1 in Percival, 1) [adapted to receive a nut or a lock:] each stem extends from one clamping member through an aperture (aperture in Labyer

which holds the stem) in an adjacent clamping member, and wherein a nut (nut 4 in Percival) engages the stem to couple the clamping members.

Regarding claim 14, Percival-Smith discloses a space (fig.1, 15) is defined between a base of the cylinder and a base of the piston for accommodating hydraulic fluid.

Regarding claim 15, Percival-Smith discloses the assembly includes a fluid inlet port (fig.1, 22) to permit the input of hydraulic fluid to the cylinder.

Regarding claim 16, Labyer et al. in view of Percival-Smith discloses a chamber (fig.1 in Percival, 21) is included in the/each member to provide a common feed for hydraulic fluid to all cylinders within the member (if there's only one cylinder it is clear that there would be a common feed since there would only be one chamber).

**Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labyer et al. (USP 4033701) in view of Percival-Smith (USP 5468106), as applied to claim 9 above, and further in view of Kennedy et al. (USP 5904071).**

Regarding claim 11, Labyer et al. in view of Percival-Smith fail to disclose a spring is arranged within the hydraulic cylinder to tension the said stem.

Kennedy et al. teaches the use of a spring (23) arranged within the hydraulic cylinder to tension the said stem.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made use of the spring, as taught by Kennedy et al., in the hydraulic cylinder as disclosed by Percival-Smith in order to provide the predictable

result of tensioning the stem thereby facilitating the return of the piston to a non-actuated state.

Regarding claims 12 and 13, Labyer et al. in view of Percival-Smith fail to disclose the assembly includes non-rotational arrangement comprising a pin locating in a matching recess arranged parallel to the stem for preventing rotation of said stem.

Kennedy et al. teaches the use of a pin (fig.6, 75) locating in a matching recess arranged parallel to the stem for preventing rotation of said stem.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the assembly disclosed by Labyer et al. in view of Percival-Smith to include a non-rotational arrangement as taught by Kennedy et al. for the purpose of preventing rotation of said stem. In addition, such an arrangement would provide the predictable result of preventing frictional losses in the assembly due to unwanted rotation of the piston.

#### ***Allowable Subject Matter***

Claims 17, 19-22 are allowed over the prior art.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS DIAZ whose telephone number is (571)270-5461. The examiner can normally be reached on Monday-Friday 7:30am to 4:00pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAMES PILKINGTON/  
Primary Examiner, Art Unit 3656

/Thomas Diaz/  
Examiner, Art Unit 3656